1 4.9 PUBLIC SERVICES

- 2 This section characterizes the fire protection and emergency response impacts
- 3 generated by the proposed Project, including the ability of locally provided and funded
- 4 fire protection and emergency response services to respond to emergency situations at
- 5 PRC 421 and the impacts of the proposed Project and Alternatives on these services
- 6 and capabilities. The Environmental Setting discusses the capacity of the SBCFD and
- 7 OES to respond to incidents at PRC 421. This section also describes Venoco's existing
- 8 fire protection and emergency response systems and equipment at PRC 421.
- 9 A detailed analysis of risks from fires, explosions, and oil spills associated with the
- 10 proposed Project and its Alternatives is presented in Section 4.2, Safety. Details
- regarding the emergency response capability for potential incidents (e.g., oil spills) are
- 12 also discussed in Section 4.2, Safety.
- 13 Information contained in this section was derived from the Goleta GP/CLUP, and
- 14 several Venoco emergency preparedness plans, including the EAP and South Ellwood
- 15 Facilities Fire Prevention and Preparedness Plan. This section also incorporates by
- reference and summarizes the conclusions of the EMT EIR, as appropriate. Where this
- document relies upon MMs contained in the EMT EIR to address Project impacts, these
- measures are summarized to permit comprehension of their relationship to the Project.

19 **4.9.1 Environmental Setting**

- 20 Regional Fire Protection and Emergency Response
- 21 The SBCFD provides fire protection services to the Project area. The SBCFD serves
- 22 an area of approximately 1,441 square miles of unincorporated and incorporated areas
- 23 of the county. The SBCFD has 15 fire stations. Six fire stations are located in the
- 24 Goleta valley and three (Fire Stations 11, 12, and 14) are located within Goleta's city
- 25 limits. In general, all firefighters are trained as emergency medical technicians (City of
- 26 Goleta 2006).
- 27 The SBCFD employs the following three standards with respect to provision of fire
- 28 protection services:
- 29 1. Firefighter-to-population ratio of one firefighter on duty 24 hours a day for
- 30 every 2,000 in population as the ideal goal, and one firefighter per 4,000 in
- population as the absolute maximum population that can be adequately
- 32 **served.** Fire stations 11, which services the proposed Project area, and 12 fell

short of this service standard as of 2005, as indicated in Table 4.9-1. The current ratio of firefighters-to-population is 1 per 4,909 citywide.

Table 4.9-1. Goleta Fire Station Service Characteristics, 2005

Station Number	Location/Address	Population Served ¹	Personnel ²	Equipment ³	Population per Firefighter
11 ⁴	6901 Frey Way (Storke Rd. south of Hollister Ave.)	21,594	3	P, T, RP, WR, US&R	7,198
12	5330 Calle Real	16,623	3	P, RP	5,541
14	320 Los Carneros	5,960	3	P, BT	1,987
	Total	44,177	9		4,909

¹ Population estimated as of 2000 U.S. Census.

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- A ratio of one engine company with a four-person crew per 16,000 in population. The National Fire Protection Association (NFPA) guidelines state that engine companies shall be staffed with a minimum of four on-duty personnel. Currently all three fire stations within the Goleta city limits are staffed with 3person crews (refer to Table 4.9-1).
- 3. A 5-minute response time in urban areas. Most of Goleta falls within the 5-minute response time from existing fire stations; however, the western city edge and some northern neighborhoods may experience longer response times (City of Goleta 2006). Fire station response times to PRC 421 are shown in Table 4.9-2.

21 Table 4.9-2. Goleta Fire Station Response Times to PRC 421

Station Number	Location/Address	Distance to PRC 421 (miles)	Response Time to PRC 421 ¹
11	6901 Frey Way (Storke Rd. south of Hollister Ave.)	3.5	8-10 minutes
12	5330 Calle Real	4.0	12-14 minutes
14	320 Los Carneros	5.5	10-12 minutes

22 Source: ¹SBCFD 2006.

The Office of Emergency Services was once a division of the SBCFD but currently acts

24 under direction from the County Executive Offices.

^{5 &}lt;sup>2</sup> Personnel on duty for each shift, plus one chief officer not assigned to a particular station.

⁶ P = pumper; T = ladder truck; RP = reserve pumper; WR = water rescue; US&R = urban search and rescue; BT = brush truck

⁴ Truck 11 and 3 additional firefighters serve as countywide emergency response and are not dedicated to serve solely station 11's district.

¹⁰ Source: City of Goleta 2006.

- 1 In addition, a fire station at Santa Barbara Municipal Airport is staffed by Santa Barbara
- 2 city firefighter personnel and responds only to fires in the Airport Operating Area (AOA),
- 3 the area located within the security fence that surrounds the airport consisting primarily
- 4 of runways and taxiways. These firefighters and their specialized equipment are
- 5 prohibited by Federal Aviation Administration (FAA) regulations from leaving the AOA.
- 6 County firefighters are called upon to supplement Santa Barbara city fire staff in the
- 7 event of an airport emergency. Fire Station 17, located on the UCSB campus, provides
- 8 service to UCSB and most of Isla Vista. Engine 17 is a county fire engine and, if
- 9 available, may be called upon for assistance when needed. The ambulance and station
- are owned and operated by UCSB.
- 11 The SBCFD has determined that the most under-served area in the city of Goleta is the
- 12 extreme western portion, which encompasses the Project location. In conjunction with
- the county, Goleta will provide a 2-acre site for a proposed new fire station (Station 10)
- to serve the western area of the city (Figure 4.9-1). The new fire station would be
- 15 constructed as soon as funding becomes available (City of Goleta 2006). Goleta
- 16 collects several types of Development Impact Fees to offset the additional demands
- 17 generated by new development on public facilities throughout the city, one of which
- 18 goes directly toward the goal of building the new fire station. Construction of the fire
- station would likely cost nearly \$5 million; currently the city has collected approximately
- 20 \$700,000 towards that goal (SBCFD 2006). However, the proposed Project would not
- 21 be subject to these fees as it is not included in the categories of projects for which such
- 22 fees are assessed (e.g., single-family dwelling, dwelling other than single-family, retail
- 23 commercial, and non-retail commercial).

24 Fire Protection and Emergency Response at PRC 421

- 25 According to Venoco's South Ellwood Field EAP, Venoco will call 911 to notify the
- 26 SBCFD, the Santa Barbara County Sheriff, Santa Barbara County OES, and Santa
- 27 Barbara County Energy Division for all emergencies. In addition to Santa Barbara
- 28 County's publicly provided fire protection and emergency response equipment, oil
- 29 facilities are required by Federal and State regulations to have onsite fire fighting
- 30 equipment as well as materials to control oil spills or other hazardous materials
- 31 releases. Venoco has fire fighting and emergency response capabilities for its South
- 32 Ellwood Field facilities in accordance with these regulations. Table 4.9-3 lists fire
- protection and control equipment available at the EOF, EMT, and Ellwood Pier.

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FIGURE 4.9-1. FIRE PROTECTION SERVICES IN THE PROJECT VICINITY

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1 Table 4.9-3. Venoco Fire Protection and Control Equipment

Facility	Equipment	
EMT	Extinguishers and fire water tank	
EOF	Extinguishers, hoses, fire foam and fire monitors, hydrants, fire blankets, fire alarm, smoke detectors, and combustible gas detector	
Ellwood Pier	Extinguishers, fire water tank, and fire hose reels	

2 Source: Venoco 1998.

3 Venoco Emergency Management System

- 4 All emergency incidents that occur on Venoco property or facilities are managed
- 5 utilizing an Incident Command System (ICS) consistent with standard Federal and State
- 6 emergency command structure guidelines. This system provides the capability and
- 7 flexibility to respond to a wide range of emergency incidents, allows for complete
- 8 integration with all government agency emergency response organizations, and ensures
- 9 the proper and efficient response to all emergency incidents.
- 10 The Venoco Emergency Management System is a two-tier organization consisting of a
- 11 corporate Sustained Incident Response Team (SIRT) and a facility-based Initial Incident
- 12 Response Team (IIRT). Personnel assigned specific positions on the SIRT and IIRT
- 13 are required to be thoroughly familiar with their roles and responsibilities and to
- 14 participate in specified training programs and exercises simulating emergency events.
- 15 Emergency response contractors and Oil Spill Response Organizations are also
- 16 integrated into this emergency management system. The Venoco Emergency
- 17 Management System is described in detail in the South Ellwood Field EAP (Venoco
- 18 1998).
- 19 Initial Incident Response Team
- 20 In the event of an emergency incident, the IIRT would be activated immediately and
- 21 would provide Venoco's initial response. The IIRT consists of all facility personnel on
- 22 site at the time of an incident and all other facility personnel who may be available for
- 23 immediate return (Venoco 2003).
- 24 PRC 421 would not be staffed with on-site personnel, however all operational systems
- 25 and safety systems from Well 421-2 would be monitored on a real-time basis at the
- 26 EOF. Venoco's onsite response techniques, including those for PRC 421, are built
- 27 upon the equipment and manpower resources available at the EOF, Platform Holly, and
- 28 from Clean Seas, an oil-spill-response cooperative to which Venoco is a member.
- 29 Facility staff at the EOF, consisting of 2 to 3 people at night and as many as 10-12

- 1 people during the day, would be the first to be alerted of an incident at PRC 421, and
- 2 would be the first in-time to respond to such an incident.
- 3 The IIRT Incident Commander, which would be the facility supervisor or the operator-in-
- 4 charge, would work with local agency emergency response organization incident
- 5 commanders within a unified command structure. The unified command formulates
- 6 tactical and strategic decisions to ensure efficient and effective response to the
- 7 emergency. Depending on the size and complexity of the incident, the IIRT Incident
- 8 Commander may expand the response organization to include members of the SIRT as
- 9 necessary. At any time during the incident, the IIRT Incident Commander may request
- transfer of command to the SIRT, or the SIRT Incident Commander may formally take
- 11 command of the incident.
- 12 Sustained Incident Response Team
- 13 Venoco's SIRT is designed and organized to respond to a major onsite incident or major
- incident with onsite and offsite consequences. The SIRT is designed to augment and/or
- 15 expand the capabilities of the IIRT as needed. The degree to which the SIRT is
- activated is dependent on the nature and size of the incident. The SIRT Command Post
- is designated as the Clean Seas Support Yard in Carpinteria, California (Venoco 1998).
- 18 The SIRT is organized into five functional sections: Command, Operations, Planning,
- 19 Logistics, and Finance. The Command Section is responsible for overall management
- 20 of the response and includes certain staff functions required to support command
- 21 function. The Operations Section is responsible for directing and coordinating all
- 22 offshore, shoreline, and land operations responses to an incident. The Planning
- 23 Section is responsible for the collection, evaluation, and dissemination of tactical
- 24 information about the incident. The Logistics Section is responsible for providing all
- support needs to the response efforts. The Finance Section is responsible for providing
- 26 financial services (Venoco 2003).
- 27 When activated by the SIRT Incident Commander, representatives from the five
- functional sections of the SIRT will respond to the Command Post within 12 hours of the
- 29 onset of the event. Emergency response contractors and Oil Spill Response
- 30 Organizations will respond in accordance with Federal and State requirements and
- 31 Venoco emergency response plans (Venoco 1998, 2005).

1 Fire Prevention and Preparedness Plan

- 2 Venoco does not have a fire protection plan specific to PRC 421 facilities. Venoco has
- a South Ellwood Facilities Fire Prevention and Preparedness Plan (Venoco 2003) that
- 4 defines the measures to be implemented and maintained by Venoco personnel in the
- 5 event of a fire. The plan contains safety and fire prevention, detection, and protection
- 6 systems for the EMT and the EOF. This plan is designed to be implemented in
- 7 conjunction with the South Ellwood Field EAP, Emergency Evacuation Plans, and H₂S
- 8 Contingency Plans; however, the plan does not contain measures specific to PRC 421.

9 4.9.2 Regulatory Setting

- 10 Fire protection systems detailed in fire protection plans must include systems and
- 11 designs that ensure compliance with a range of codes and standards. A number of
- 12 Federal, State, and local laws that regulate marine terminals, vessels, and pipelines
- 13 also have implications for fire protection and emergency response. Please refer to
- 14 Section 4.2, Safety, for a complete description of these requirements.

15 <u>Federal</u>

- 16 Federal regulations directly applicable to fire protection and emergency response issues
- 17 include:
- Title 29, Labor, of the CFR 1910.38, EAPs;
- 29 CFR 1910.39, Fire Prevention Plans; and
- 29 CFR 1910.155, Subpart L, Fire Protection.

21 State

- 22 The California State Fire Marshal has responsibility for the safety of all intrastate
- 23 hazardous liquid pipelines and all interstate pipelines used for the transportation of
- 24 hazardous or highly volatile liquid substances. State regulations administered by the
- 25 State Fire Marshall relating to fire and life safety include:
- Title 19, Public Safety, of the CCR. These regulations have been prepared and adopted for the purpose of establishing minimum standards for the prevention of fire and for the protection of life and property against fire, explosion, and panic;
- California Health and Safety Code, section 13160, Portable Fire Extinguishers;
 and

- California Health and Safety Code, section 13195, Automatic Fire Extinguishers
 Systems.
- 3 Local
- 4 Santa Barbara County and the city of Goleta have a number of requirements governing
- 5 fire protection and emergency response applicable to PRC 421.
- Santa Barbara County Code Chapter 15, Amendments to the 2001 California Fire
 Code (CFC);
- SBCFD Standard 1, Private Road and Driveway Standards;
- SBCFD Standard 2, Fire Hydrant Spacing and Flow Rates;
- SBCFD Standard 3, Stored Water Fire Protection Systems Serving One and Two
 Family Dwellings;
- SBCFD Standard 4, Automated Fire Sprinkling Systems;
- SBCFD Standard 5, Automatic Alarm System Standards.
- Santa Barbara County Permit Conditions, Various;
- Santa Barbara County Public Works Engineering Design Standards, Roadways;
 and
- Santa Barbara County Ordinance 2919 [95-DP-024] (Venoco, Inc.'s Operating
 Permit for the EOF and the EMT).
- City of Goleta GP/CLUP, Policy 8.3 requires annual safety audits of all new and existing oil and gas production, processing, and storage facilities. The city, or its agent, shall participate in these safety audits. All deficiencies noted in each audit shall be addressed promptly, in timeframes as recommended by the audit's conclusions.
- 24 Other Recognized Codes and Standards
- 25 Other codes and standards are specified by the American National Standards Institute
- 26 (ANSI), API, Industrial Risk Insurers (IRI), NFPA, and CFC (see Table 4.9-4).

1 Table 4.9-4. Applicable Standards and Codes

Code/Standard	Description		
ANSI B31.4	Liquid Petroleum Transportation Piping Systems		
API RP 500	Classification of Hazardous Areas in Petroleum Pipeline Facilities		
API Pub 2004	Inspection for Fire Protection		
IRI IM.2.5.2	Plant Layout and Spacing for Oil and Chemical Plants		
IRI IM 17.3.3	Guiding Principles For Loss Prevention and Protection of Crude Oil and Petroleum Products Pumping Stations		
IRI IM 17.3.4	Guiding Principles For Loss Prevention and Protection of Crude Oil and Petroleum Products Storage Terminals		
NFPA 11	Low Expansion Foam and Combined Agent Systems		
NFPA 12	A&B Halogenated Extinguishing Agent Systems		
NFPA 15	Water Spray Fixed Systems		
NFPA 20	Centrifugal Fire Pumps;		
NFPA 22	Water Tanks for Private Fire Protection		
NFPA 24	Installation of Private Fire Service Mains and Their Appurtenances		
NFPA 25	Inspection, Testing and Maintenance of Water-Based Fire Protection Systems		
NFPA 30	Flammable and Combustible Liquids Code		
NFPA 70	National Electric Code		
CFC Article 02, Division II	Special Procedures		
CFC Article 04	Permitting		
CFC Article 09	Definitions and Abbreviations		
CFC Article 10	Fire Protection		
CFC Article 11	General Precautions Against Fire		
CFC Article 12	Maintenance of Exits and Occupant Load Control		
CFC Article 13	Smoking		
CFC Article 14	Fire Alarm Systems		
CFC Article 49	Welding and Cutting		
CFC Article 79	Flammable and Combustible Liquids		
CFC Article 80	Hazardous Materials		
CFC Article 85	Electrical Systems		

² ANSI - American National Standards Institute

³ API - American Petroleum Institute

⁴ IRI - Industrial Risk Insurers

⁵ NFPA - National Fire Protection Association

⁶ CFC - California Fire Code

1 4.9.3 Significance Criteria

- 2 Impacts to fire protection and emergency response services would be considered
- 3 significant if:

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- Operation of the Project creates the need for one or more additional employees in order to maintain the current level of fire protection and emergency response services:
- The Project results in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain the current level of fire protection and emergency response services;
- The Project is located more than 10 miles or 15 minutes from an emergency response location with fire fighting and spill response capabilities;
- Accessibility to the Project site is difficult or limited; or
- The Project does not have an approved fire protection or emergency response plan.

4.9.4 Impact Analysis and Mitigation

- 16 Construction of the Project would not impact Public Services. However, PRC 421 is
- 17 located in an area that is identified as being under-served by fire protection services
- available by the SBCFD. The facility is outside of the standard safe response time of 5
- 19 minutes, but within the significance threshold of 15 minutes, and the firefighter ratio
- 20 does not meet standard requirements. Santa Barbara County and the city of Goleta
- 21 identified the need for a new fire station within Goleta's city limits. Recommissioning
- 22 PRC 421 would not create the need for additional SBCFD firefighters or for a new fire
- 23 station in Goleta, but would incrementally contribute to demand for fire inspection and
- 24 protection services in an area that is currently under-serviced.

25 Impact PS-1: Contribution to the Need for a New Fire Station in Goleta

- 26 The incremental increase for fire protection services caused by reactivating oil
- 27 production in an area which is currently under-serviced contributes to the need
- for a new fire station in Goleta (Potentially Significant, Class II).

29 Impact Discussion

- 30 The SBCFD has determined that the most under-served area in Goleta is the western
- 31 part of the city, including the Project area, due to both response times and the

- 1 population to firefighter ratio. It is assumed that the ratio in the area will worsen as new
- 2 housing and development projects are constructed. Annual inspections, emergency
- 3 response, and planning activities associated with the proposed Project would
- 4 incrementally add to the demand for fire protection services. Currently there does not
- 5 appear to be a mechanism, such as an impact development fee, that would hold
- 6 Venoco responsible for its portion of this service demand increase. Therefore, impacts
- 7 with regard to fire protection and emergency response services would be considered
- 8 potentially significant (Class II) for the proposed Project but can be mitigated to less
- 9 than significant with the implementation of Mitigation Measure PS-1.

Mitigation Measures

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MM PS-1. Impact Development Fee. Venoco shall provide an impact development fee payment to the Santa Barbara County Fire Department that would be directed toward the eventual construction of a new fire station. Appropriate fees shall be determined by Venoco and the CSLC in consultation with Goleta City staff, and the Santa Barbara County Fire Department.

Rational for Mitigation

- 18 No mechanism currently exists for Venoco to mitigate for its incremental need of fire
- 19 protection and emergency services within a currently under-serviced area. Other
- 20 development projects in the community pay impact development fees that go towards
- 21 the city's fund to build a new fire department. These fees are based on the type of
- 22 development; therefore, Venoco could mitigate its incremental impact on publicly
- 23 provided fire protection and emergency services by paying a similar fee.
- 24 Impact PS-2: Operation without an Approved Fire Prevention Plan
- 25 Operating PRC 421 without an approved fire protection plan could result in an
- 26 unsafe situation if an emergency requiring response by Venoco or by the SBCFD
- 27 were to occur (Potentially Significant, Class II).
- 28 Impact Discussion
- 29 As detailed above, PRC 421 must meet a number of Federal, State, and local
- 30 requirements relating to fire protection and emergency response. The SBCFD and
- 31 OES, in addition to other agencies, conduct an annual operational and safety inspection
- of the PRC 421 facilities. Venoco has an emergency management system in place to
- 33 facilitate management and response activities for emergency incidents occurring in the
- 34 South Ellwood Field. However, Venoco does not have an approved fire protection plan

- 1 for PRC 421. Therefore, impacts with regard to fire protection and emergency response
- 2 services would be considered potentially significant for the proposed Project. Operating
- 3 PRC 421 without an approved fire protection plan could result in an unsafe situation if
- 4 an emergency requiring response by Venoco or by the SBCFD were to occur. This
- 5 impact would be potentially significant (Class II) but can be mitigated to less than
- 6 significant with the implementation of Mitigation Measure PS-2.

Mitigation Measures

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MM PS-2. Prepare Fire Prevention Plan for PRC 421. Venoco shall prepare a fire prevention plan that includes fire prevention strategies for the proposed Project area. The plan may either be in the form of a stand alone plan for the PRC 421 facilities or included as an update to the South Ellwood Facilities Fire Prevention and Preparedness Plan.

13 Rational for Mitigation

- 14 A fire prevention plan is required for the operation of PRC 421. Preparation of this plan
- will meet requirements and will reduce the significance of impact PS-2.

16 <u>Impacts Related to Future Transportation Options</u>

- 17 For the purposes of this analysis, it is assumed that Line 96 and the EMT would be
- used to transport crude oil recovered from PRC 421 using the barge Jovalan to ship the
- oil to a Los Angeles or San Francisco Bay area refinery through approximately the year
- 20 2013. However, as discussed earlier in this EIR (Sections 1.2.4, 2.4.2, and 3.3.6),
- several options exist for future transportation of oil from the Project, each with different
- 22 potential impacts to public services. These include ongoing use of the EMT through
- 23 2013, use of a pipeline to Las Flores Canyon, and trucking of oil to Venoco's ROSF
- 24 Facility 35 miles to the south and subsequent transport to Los Angeles via pipeline.
- 25 Impacts to public services are not anticipated from use of the existing EMT
- transportation system.
- 27 Because the timing and exact mode of transportation of produced oil after the initial five
- years of Project operation are speculative at this point in time, the potential impacts of
- use of a pipeline or trucking are only briefly summarized here and are fully disclosed as
- part of the alternatives analysis (Section 4.9.5; Impact PS-3). If neither of these options
- 31 is permitted or available by the cessation of operation of the EMT, production from PRC
- 32 421 would be stranded, at least temporarily, until an alternative transportation mode is
- approved and becomes available.

- 1 Future transportation of oil through an 8.5-mile pipeline from the EOF to the AAPL at
- 2 Las Flores Canyon is not anticipated to create any impacts to public services. The
- 3 potential for an oil spill during operation of the pipeline is discussed in Section 4.2,
- 4 Safety.
- 5 Future transportation of oil via a combination of trucking for 35 miles from the EOF to
- 6 the ROSF and via existing pipeline south to Los Angeles could incrementally increase
- 7 the potential for tanker-related accidents. Under the proposed Project, trucking would
- 8 commence no earlier than 2013, and would involve not more than 2 trucks per day
- 9 carrying 160 barrels of oil each, declining to 1 truck per day in the later years of Project
- operation (see Section 3.3.6, Transportation Sub-Alternative Options, Table 3-2).
- 11 Based upon the projected frequency of trucking and the distances traveled, shipment of
- oil via trucking is anticipated to create a less than significant public services impact
- 13 (Impact PS-3) due to the incremental increased potential for accidents to occur (see
- 14 Section 4.2, Safety).

15 Table 4.9-5 Summary of Public Services Impacts and Mitigation Measures

Impact	Mitigation Measures
PS-1: Contribution to the Need for a New Fire Station in Goleta	PS-1. Impact Development Fee.
PS-2: Operation without an Approved Fire Prevention Plan	PS-2. Prepare a Fire Prevention Plan for PRC 421.

16 **4.9.5** Impacts of Alternatives

17 No Project Alternative

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Under the No Project Alternative, Venoco would not recommission PRC 421, the wells would be shut-in, and existing infrastructure would be subsequently decommissioned with its components abandoned in place, removed, or a combination thereof. Full

decommissioning of Project facilities including Piers 421-1 and 421-2, the access road

22 and seawall, pipelines, and power cables would occur in the future after a determination

23 by the CSLC regarding this Alternative. Potential impacts associated with the

decommissioning of PRC 421 would be evaluated in a separate analysis. Because the

facility would not be recommissioned, the No Project Alternative would not result in the

26 need for a fire prevention plan for PRC 421 or in an incremental addition to the demand

for SBCFD services. Therefore, there would be no impacts to publicly provided fire

prevention and emergency services.

1 No Project Alternative with Pressure Testing

- 2 Under this Alternative, pressure testing of the Vaqueros Reservoir would be conducted
- 3 for a 6- to 12-month period as required by the CSLC. No pile-driving or repairs to
- 4 caissons would occur. Oil and water emulsion would still be produced as a result of the
- 5 testing, and would be directed through a new 2-inch hard aboveground pipe to the
- 6 existing pipeline (with upgrades) to the EOF. The incremental demand for fire
- 7 protection and emergency services would not last as long under the No Project
- 8 Alternative with Pressure Testing (6 to 12 months compared to approximately 12 years).
- 9 Impacts to Santa Barbara County's publicly provided fire protection and emergency
- 10 response services would be the similar to, although a shorter duration than, the impacts
- 11 that would occur under the proposed Project. Venoco would need to develop a fire
- 12 protection and emergency response plan for the pressure testing period.
- 13 Full decommissioning of Project facilities, including Piers 421-1 and 421-2, the access
- 14 road and seawall, pipelines, and power cables, would occur in the future after a
- determination by the CSLC regarding this Alternative. Potential impacts associated with
- full decommissioning of PRC 421 would be evaluated in a separate analysis.

17 Onshore Oil Separation at the EOF

- 18 Under this Alternative, PRC 421-2 would be put into production, the associated
- 19 additions to the existing 6-inch pipeline would be completed, and the electrical cables
- 20 would be installed via trenching; however, the separation of oil, gas, and water would
- 21 occur at the EOF and water would be disposed of at well WD-1. Like the proposed
- 22 Project, the resumption of oil production at PRC 421-1 would add incrementally to the
- 23 demand for fire protection and emergency services in an area that is currently under-
- 24 serviced for such services. Under this Alternative, impacts to Santa Barbara County's
- 25 publicly provided fire protection and emergency response services would be the same
- as the impacts that would occur under the proposed Project. The EOF has an approved
- 27 fire prevention and preparedness plan (Venoco 2003), however this plan would need to
- be updated to include PRC 421 or a separate fire protection and emergency response
- 29 plan would need to be developed for PRC 421.
- 30 Under this Alternative, Pier 421-1 would not be required for water re-injection and the
- 31 decommissioning of Pier 421-1 would therefore be accelerated. The decommissioning
- would require submittal of a decommission plan for Pier 421-1 to the CSLC and the city
- 33 of Goleta within approximately 6 months of approval of this Alternative. The
- decommissioning plan would be subject to further environmental review.

1 Recommissioning Using Historic Production Methods

- 2 Under this Alternative, production would resume at PRC 421 essentially in its historical
- 3 configuration at the time prior to the wells being shut-in in 1994, while incorporating new
- 4 technologies to comply with current industrial and environmental standards. Like the
- 5 proposed Project, resumption of oil production at PRC 421 would add incrementally to
- 6 the demand for fire protection and emergency services in an area that is currently
- 7 under-serviced. Under this Alternative, impacts to Santa Barbara County's publicly
- 8 provided fire protection and emergency response services would be the same as the
- 9 impacts that would occur under the proposed Project. The resumption of oil production
- and the use of a gas-fired internal combustion engine at PRC 421 would necessitate a
- 11 fire protection and emergency response plan.

12 Re-injection at Platform Holly

- 13 Under this Alternative, all aspects of the Project would remain the same with the
- 14 exception that Pier 421-1 would be decommissioned and produced water would be
- transported via pipeline to Platform Holly and re-injected offshore rather than at 421-1.
- 16 Under this Alternative, impacts to Santa Barbara County's publicly provided fire
- 17 protection and emergency response services would be the same as the impacts that
- would occur under the proposed Project. The resumption of oil production at PRC 421
- would necessitate the need for a fire protection and emergency response plan.
- 20 Under this Alternative, Pier 421-1 would not be required for water re-injection and the
- 21 decommissioning of Pier 421-1 would be accelerated. The accelerated
- 22 decommissioning would require submittal of a decommissioning plan for Pier 421-1 to
- 23 the CSLC and the city of Goleta within approximately 6 months of approval of this
- 24 Alternative. The decommissioning plan would be subject to further environmental
- 25 review.

26 Transportation Sub-Alternative Options

27 Pipeline Sub-Alternative

- 28 This method of crude oil transportation would involve the construction of an onshore 6-
- 29 inch-diameter crude-oil pipeline from the EOF to the AAPL at Las Flores Canyon. As
- 30 discussed in Section 4.2. Safety, spill frequencies for the pipeline transportation
- 31 alternative are expected to be less than significant during pipeline operation. Therefore,
- 32 there are no anticipated impacts associated with the use of the pipeline to publicly
- 33 provided fire protection and emergency response services.

- 1 Trucking Sub-Alternative
- 2 Impact PS-3: Fire Protection Services Related to Truck Transportation
- 3 The trucking transportation operation could incrementally increase the need for
- 4 Public Services (Less than Significant, Class III).
- 5 Impact Discussion
- 6 Impacts associated with the use of the trucking alternative transportation options for the
- 7 remaining Project life would be less than significant. The truck transportation option is
- 8 not expected to result in a substantially increased potential for truck accidents (see
- 9 Section 4.2, Safety), and therefore impacts to fire protection and emergency response
- 10 services would be adverse but less than significant (Class III).
- 11 <u>Mitigation Measures</u>
- 12 None required.
- 13 4.9.6 Cumulative Projects Impact Analysis
- 14 The effect of increased oil and gas, residential, and commercial development in the
- 15 Project area has cumulatively affected the SBCFD. Currently the maximum acceptable
- 16 ratio of firefighter-to-population is exceeded in the Goleta area. As other projects are
- 17 developed in the area, the firefighters-to-population ratio will become worse. The
- 18 proposed Project would add incrementally to the demand for publicly provided fire
- 19 protection and emergency response services in this under-serviced area. Therefore,
- 20 the proposed Project would cause a significant cumulative impact to publicly provide fire
- 21 protection and emergency services.